DOCUMENT RESUME

ED 074 794 FL 003 410

AUTHOR	Ramsey, Craig A.; Wright, E. N.
TITLE	The "Graduate" Study.
INSTITUTION	Toronto Board of Education (Ontario). Research Dept.
PUB DATE	May 69
NOTE	44p.
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	Comparative Analysis; *Comparative Education; Comparative Testing; *English (Second Language); Ethnic Groups; Intensive Language Courses; Minority Groups; *Non English Speaking; *Program Descriptions; Program Evaluation; Secondary Schools; *Second Language Learning; Teaching Methods
IDENTIFIERS	*Canada

ABSTRACT

This report compares several educational programs for non-English-speaking students in Toronto, Canada. The Main Street program, initiated in 1965, is a full-time program of "cultural immersion" for students 12 years of age and older. The Givens Public School presented a similar program at the same time within a regular school. This program, referred to as a "reception center," and the "cultural immersion" program are contrasted with the "withdrawal programs" in operation throughout the city. Comparisons of results of the programs are made between students who had been in any of the programs and then graduated to a regular class. Results are assessed both in terms of test performance and teachers' assessments of the students. Subjects in this study represent six predominant language groups including Chinese, Greek, Italian, Polish, Portuguese, and Yugoslavian. Statistical data are illustrated by several charts and graphs. A sample questionnaire, "The New Canadians," is included. (RL)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ED 074794

RESEARCH SERVICE

issued by the
Research Department

FL003 410

THE BOARD OF EDUCATION FOR THE CITY OF TORONTO

ED 074794

THE "GRADUATE" STUDY

Craig A. Ramsey
E. N. Wright

May, 1969

TABLE OF CONTENTS

	Page No.
INTRODUCTION AND PURPOSE	1
PROCEDURE	4
Obtaining the Sample	4
Sample Problems	5
Sample Description	6
Sample Characteristics	10
Present Grade and Age of "Graduates"	14
Time Spent in Special Programmes	15
RESULTS	23
SUMMARY	36
APPENDIX	38

THE "GRADUATE" STUDY

INTRODUCTION AND PURPOSE

The Board's request for a full-scale study of New Canadian students in the Toronto schools also asked for --

> "...a comparison of the methods being applied and the results at Main Street School as opposed to the programmes being conducted elsewhere."[1]

It is not necessary to specify the variety of students in these programmes; they vary in age, prior education, prior instruction in English and even their homes vary as to the amount of English spoken and the educational background of parents. The descriptive report[2] has indicated the range of students' backgrounds and environments.

Main Street, since 1965, has presented a full-time programme of "cultural immersion." This school has students mainly in the eastern part of the City who were 12 years of age or older. There is a low student/teacher ratio and freedom from fixed curricula and examinations.

Givins Public School was presenting a similar programme at the same time; however, it served only its own school district and the special programme was run within a regular school. This type of operation is now often referred to as a "reception centre" or a "mini-Main Street." Given the small sample of students available for the study which was requested, and the similarity of the programmes in the two schools, at that time, it seemed wise to place them together in contrast to the withdrawal programme.

---

1 Meeting of the Board, June 31, 1967.

2 Research Department. Students of Non-Canadian Origin: A Descriptive Report of Students in Toronto Schools. Toronto: Board of Education for the City of Toronto, Research Department, 1969.

The withdrawal method is the other major kind of programme in operation in schools across the City. It is a part-time programme; non-English speaking students are placed in a regular class to benefit from contact with English speaking students, and they are regularly withdrawn from their classes for special English instruction (usually once a day).

The two major programmes are different in the numbers and the age groups they serve. The withdrawal programmes, most of which are located in the elementary schools,[3] serve the largest number and have been in operation longer. The Main Street programme serves the over 12-year age group, and includes many students in a secondary school age range. The reception centres at present are serving some children under 12.

It was decided that a comparison of <u>results</u> of these programmes to be objective and meaningful must be made between students who <u>had been</u> in the programmes and had "graduated" to regular classes. Results would be assessed both in terms of test performance and teachers' assessments of the students.

Since there were far fewer Main Street "graduates" than withdrawal "graduates," even though Givins was included, it was decided to start with the Main Street "graduates" using as many of these students as possible in the study. The major language groups found at Main Street, taking into account age and sex, were used to select a matched sample of withdrawal "graduates" for comparison purposes.

As the selection for these two samples was not random, and because of the relatively small numbers involved, the valid comparisons possible would be limited to a specific age range; comparisons would also be limited by the tests that were used. Some general comparisons were made

---

3 Programmes within secondary schools are withdrawal programmes but there are fewer of them and they are more recent.

between these groups and the City-wide population in Grades 5, 7 and 9. This was possible as the students for this substudy completed the same material at the same time as the large random sample, described in a previous report (see previous reference, Students of Non-Canadian Origin: A Descriptive Report of Students in Toronto Schools, 1969). Reports currently in preparation will examine the progress of New Canadians who were part of this large representative population.

PROCEDURE

Obtaining the Sample

Records at Main Street[4] showed that students who had "graduated" i.e. entered full-time regular classes, represented six predominant language groups -- Chinese, Greek, Italian, Polish, Portuguese and Yugoslavian. Most of these students were born between January 1, 1950 and December 31, 1954; birthdate with half year intervals, was also used as a criterion for matching subjects from withdrawal programmes. The matching criteria for the two kinds of "graduates" were thus six language groups, ten age groups, and two sexes. This provided a possibility of 120 different categories of Main Street students.

Possible matches to the Main Street "graduates" were selected from the records of junior and senior elementary schools (because Main Street served the eastern half of the City, an attempt was made to draw most of the matches from the eastern half also) using the withdrawal method. School records provided the destination of the students who had "graduated" from the special English instruction programmes. Because Main Street was designed to serve students over 12 years of age only a small proportion of the many withdrawal "graduates" in the Toronto schools could be matched on age. In other words, many of the students in withdrawal programmes are younger than the Main Street students. Results of this study then cannot safely be generalized to younger students. Rather, this is a study of "older" students learning English as a second language. A possible sample of approximately 450 students from both programmes was identified. The next step was to verify whether they were still at the school of destination

---

4 Givins Public School also provided some students to increase the representation of the sample.

listed in the original records. The possible sample was considerably reduced as a result of students having left school, moved out of Toronto, transferred to Separate Schools, transferred to the few Toronto schools not involved in the New Canadian Study, or placed in a special English class in the new schools to which they transferred. Wherever possible, the students selected for this special substudy were tested with the randomly selected classes involved in one of the other substudies. The testing involved administration of an extensive Student Background Questionnaire, a battery of performance measures and a rating by the teacher of each student.[5] In three instances, a school which had no randomly selected classes had several of the identified "graduates," and here they were tested separately.

Incomplete test materials (Questionnaire and tests) resulted in a further loss of students. The final sample was 287 students, nearly two-thirds of the maximum sample possible if there had been no attrition or difficulties.

Sample Problems

For several reasons the adequacy of the "matching" obtained for this study and the comparisons made in it must be treated cautiously.

As previously noted, the selection of withdrawal programme "graduates" was concentrated in the eastern half of the City as this was the area served by Main Street. However, earlier studies and reports have noted that New Canadian students tend to be more concentrated in the western half of the City. This, coupled with the fact that withdrawal programmes tend to serve a slightly younger age group than does Main Street, implies that the withdrawal sample obtained, regardless of how well-matched, cannot be considered fully representative of the withdrawal "graduates" across the City.

---

5 See Appendix for a copy of the Student Background Questionnaire.

Another problem was that some students had been served by both programmes. It was necessary to include within the 287 students of the sample, 30 who had been exposed to both programmes. Of the 30, 16 had started in a withdrawal programme. The other 14 had attended Main Street (or Givins) first and later transferred to a withdrawal programme. The students were classified in terms of where they received most of their instruction in English as a second language. On this basis, all 30 were classified as Main Street "graduates" and none as withdrawal "graduates."

Additional analyses were done later to ensure that these students did not affect the direction of the findings.

The third caution arises in the degree of "closeness" obtained in matching on the factors of sex, age, and language group. As was pointed out, there were 120 categories available to classify the Main Street students for matching purposes. For each category in which there were one or more Main Street students, as many matches as possible were found. The two groups were adequately matched on the basis of the "intake" records. However, slightly less than two-thirds of these students were available for testing when the study was conducted. Statistical tests showed that the sex proportions (Table 3) were highly similar and age proportions (Table 2) moderately similar. However, the language group proportions showed a noticeable difference; as a result of attrition the two groups were not well matched on the basis of language. The resulting composition of the groups (from whom data were obtained) is detailed in the following section.

Sample Description

Data[6] were obtained on 287 students -- 180 were identified and classified as "graduates" of a withdrawal programme, 107 as "graduates"

---

6 Data were partially incomplete in that a few students were not present for all of the tests. All students completed the Questionnaire.

of a Main Street programme. Of these 107 classified as Main Street, 42 had attended Givins Public School where a similar programme had been in operation since 1965.

The report is based on these 287 students. The native languages spoken by the students in the two samples are presented in Table 1, ages in Table 2 and sex in Table 3.

TABLE 1

NATIVE LANGUAGES OF STUDENTS IN THE MATCHED SAMPLES

Native Language	Number of Students	
	Main Street School	Withdrawal Classes
Greek	31 or 29.0%	24 or 13.3%
Italian	27 or 25.2%	45 or 25.0%
Portuguese	26 or 24.3%	60 or 33.3%
Yugoslavian	9 or 8.4%	7 or 3.9%
Chinese	8 or 7.5%	28 or 15.6%
Polish	6 or 5.6%	16 or 8.9%
TOTAL	107 or 100.0%	180 or 100.0%

Chi-square = 15.69

A value of 15.09 is required for significance at the .01 level.

TABLE 2

DATE OF BIRTH OF STUDENTS IN THE MATCHED SAMPLES

Year of Birth		Number of Students	
		Main Street School	Withdrawal Classes
1950	January - June	2 or 1.9%	0 or 0.0%
	July - December	8 or 7.5%	10 or 5.5%
1951	January - June	12 or 11.2%	11 or 6.1%
	July - December	14 or 13.1%	23 or 12.8%
1952	January - June	18 or 16.8%	27 or 15.0%
	July - December	13 or 12.1%	33 or 18.3%
1953	January - June	13 or 12.1%	23 or 12.8%
	July - December	19 or 17.8%	22 or 12.2%
1954	January - June	6 or 5.6%	18 or 10.0%
	July - December	2 or 1.9%	13 or 7.2%
TOTAL		107 or 100.0%	180 or 100.0%

Chi-square = 9.35 (based on yearly intervals)

A value of 9.49 is required for significance at the .05 level.

TABLE 3

NUMBER OF MALES AND FEMALES IN MATCHED SAMPLES

Sex	Number of Students	
	Main Street School	Withdrawal Classes
Male	59 or 55.1%	96 or 53.3%
Female	48 or 44.9%	84 or 46.7%
TOTAL	107 or 100.0%	180 or 100.0%

Chi-square = .059

A value of 3.84 is required for significance at the .05 level.

As can be seen, the ages and the proportion of males and females in the two groups remained similar in spite of attrition. Variation was found with respect to native language. The Chinese and the Portuguese were considerably overrepresented and the Greeks were considerably underrepresented in the withdrawal group. Nonetheless, the groups seemed sufficiently similar to warrant continuing the data analysis. Randomly discarding subjects from the over represented language categories would not change the results greatly but would greatly reduce sample size if age and sex were kept balanced. Furthermore, as the study was concerned with the progress of students in the usual heterogeneous groups found in schools it was believed that to be educationally valid, differences had to be large, certainly large enough to show up in spite of different ethnic origins. In other words, age and sex were considered to be the more important of the matching criteria. It is worth repeating that closer matching is not possible because of the great variety of students learning English as a second language.

Sample Characteristics

The data from the Questionnaire (see Appendix) made it possible to compare the two groups on a variety of characteristics not available from the school records when the samples were drawn. The results of these additional comparisons are briefly presented below. It will be observed that there are no significant differences between the groups on most of the variables.

1. Language Learned Before English

As would be expected, no student in either group learned English first; the overwhelming proportion of both groups learning another language first. A few students in each group (3.7% of the Main Street "graduates" and 2.8% of the withdrawal group "graduates") stated that they learned another language and English at the same time.

2. English Spoken in the Home

In this category, no students lived in homes where English was spoken "always." Three-quarters of each group (74.6% of the Main Street "graduates" and 75.0% of the withdrawal group "graduates") stated that English was spoken "sometimes." The remainder, or one-quarter of each group, stated that English was "never" spoken in their homes.

3. Amount of English Spoken on Entry to School in Toronto

Again, as would be expected from the fact that all students were in special English classes, no student claimed to have spoken English when he commenced school in Toronto. However, 16.8% of the Main Street "graduates" and 20.6% of the withdrawal group "graduates" stated they could speak "some" English. This estimate of "some" must be considered a minimal one because of their presence in the special English programmes.

4. Classes in English Outside Canada

Consistent with the replies noted in the previous paragraph, it was found that 10.4% of the Main Street "graduates" and 8.5% of the withdrawal group "graduates" reported that they had received some form of instruction in English before coming to Canada. Furthermore, 4 Main Street students and 5 withdrawal students actually reported three or four years of instruction in English before coming to Canada.

5. Education in Canada: Outside Toronto

It was found that all Main Street "graduates" had commenced their Canadian education in Toronto. Among the withdrawal "graduates," 6 students (or 3.3%) had received at least one year of instruction in Canada before transferring to a Toronto school.

6. Night School Attendance

Apart from day classes with special English programmes, students have access to other programmes to learn English as a second language. One of these is night school. Attendance at night school was slightly higher for the withdrawal "graduates" (19.5%) than for the Main Street "graduates" (13.1%) but this difference (i.e. attendance vs. non-attendance) was not significant.

7. Programme (Secondary School)

Because of the different programmes available at the secondary school level and because differences were found on this variable between Canadian born and non-Canadian born students[7] the programme was compared for two groups. Sixty-nine (64.5%) of the Main Street "graduates" and 98 (54.4%) of the withdrawal "graduates" were located in secondary schools The distribution of the two groups among the programmes showed no significant difference (see Table 4).

---

7 Research Department. Students of Non-Canadian Origin: A Descriptive Report of Students in Toronto Schools. Toronto: Board of Education for the City of Toronto, Research Department, 1969.

TABLE 4

NUMBER OF STUDENTS IN DIFFERENT SECONDARY SCHOOL PROGRAMMES

Programme	Number of Students	
	Main Street School	Withdrawal Classes
Two Year	21 or 19.6%	39 or 21.7%
Three Year	4 or 3.7%	10 or 5.5%
Four Year	25 or 23.4%	31 or 17.2%
Five Year	19 or 17.8%	18 or 10.0%
Not Yet in High School	38 or 35.5%	82 or 45.6%
TOTAL	107 or 100.0%	180 or 100.0%

Chi-square = 5.876 (for the four high school programmes)

A value of 9.49 is required for significance at the .05 level.

8. Summer School Attendance

Unlike night school, the attendance of the two groups at summer school showed some differences, though not significant (see Table 5). This is important to keep in mind because it was the withdrawal "graduates" who tended to have slightly more summer school instruction.

TABLE 5

SUMMER SCHCOL ATTENDANCE OF THE MAIN AND WITHDRAWAL "GRADUATES"

Attendance	Number of Students	
	Main Street School	Withdrawal Classes
Did Not Attend	50 or 46.7%	59 or 32.8%
Attended 1 Summer	40 or 37.4%	78 or 43.3%
Attended 2 Summers	17 or 15.9%	41 or 22.8%
Attended 3 Summers	0 or 0.0%	2 or < .1%
TOTAL	107 or 100.0%	180 or 100.0%

Chi-square = 7.69

A value of 7.82 is required for significance at the .05 level.

9. Rural/Urban Background

Another factor on which the groups showed a difference was that of rural/urban background. Table 6 shows that a higher proportion of Main Street School "graduates" than withdrawal "graduates" had come to Toronto from an urban background. This might tend to favour the Main Street "graduates" as an urban background might assist in adapting to Toronto.

TABLE 6

THE RURAL/URBAN BACKGROUND OF THE "GRADUATES"

Background	Number of Students	
	Main Street School	Withdrawal Classes
Urban	51 or 47.7%	65 or 36.1%
Rural	56 or 52.3%	115 or 63.9%
TOTAL	107 or 100.0%	180 or 100.0%

Chi-square = 3.85

A value of 3.84 is required for significance at the .05 level.

Present Grade and Age of "Graduates"

As the groups were matched on age (see Table 2), it was possible to compare their grade distributions (i.e. where they are now, May, 1968). These grade distributions are presented graphically in Figure 1 and numerically in Table 7. There was a significant difference between the groups. The withdrawal "graduates" are overrepresented in the grades, note especially Grades 6 and 7. This dramatic difference is not apparent if only averages are considered. The average grade for the withdrawal students is 8.3 while it is 8.8 for the Main Street "graduate." This difference is consistent with the small difference in average age, 184.7 versus 188.4 months. More than anything these data probably reflect the fact that Main Street was preparing students primarily for placement in secondary schools.

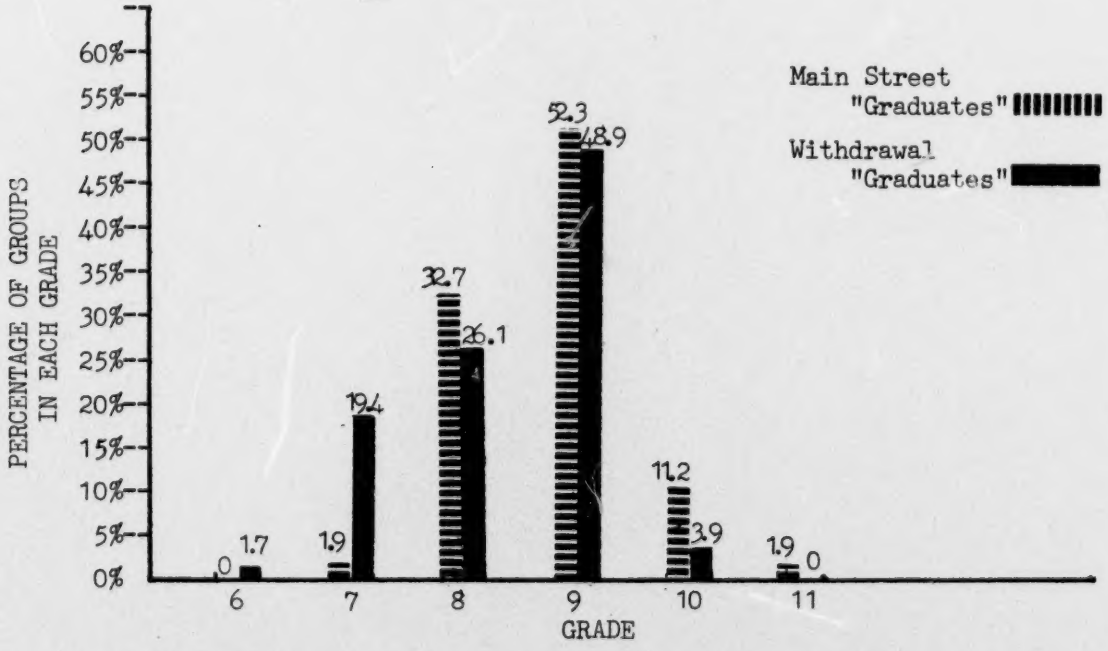

Figure 1. Present grade proportions of the "graduates" of the two programmes: per cent in each grade.

TABLE 7

GRADE DISTRIBUTIONS OF THE MATCHED SAMPLES

Grade	Number of Students	
	Main Street School	Withdrawal Classes
Six	0 or 0.0%	3 or 1.7%
Seven	2 or 1.9%	35 or 19.4%
Eight	35 or 32.7%	47 or 26.1%
Nine	56 or 52.3%	88 or 48.9%
Ten	12 or 11.2%	7 or 3.9%
Eleven	2 or 1.9%	0 or 0.0%
TOTAL	107 or 100.0%	180 or 100.0%
Average Grade	8.785	8.341

Chi-square = 26.62

A value of 20.52 is required for significance at the .001 level.

Time Spent in Special Programmes

The time spent in special programmes by the "graduate" students is an important factor in the following comparisons. A number of diverse factors, many of them uncontrollable, affecting the amount of time the students spent in the programmes limited comparisons between groups. Some of the important factors related to time in programme include: students' age on arrival in Canada, exposure to English before emigration, and amount of English used by parents. Numerous social factors such as English exposure in the community, socio-economic level of parents and attitude towards schooling could not be controlled in the study.

The most important reason, however, for viewing the time-in-programme only in a general way was one of data quality. It was obvious from an examination of individual Questionnaire responses that a small proportion of students had misinterpreted the category dealing with the time they had spent in the special programmes (information they had to recall). The Research Department had recorded the students' time in programme as accurately as possible from school records during the sample selection phase. Thus, where a clearly erroneous estimate (e.g., starting date) was made by a student, it could be corrected to the figures taken from school records. In some cases, however, the information concerning time in special programmes was based on teachers' estimates. The result was that while most of the questionable data could be verified from previously collected information, about one-fifth of the time estimates could not be fully verified and may be incorrect. This is a possibility because some errors were detected in a few of the verifiable responses. This difficulty is compounded by the fact, previously noted, that some students had been served by more than one programme.

Time-in-programme is presented first (Table 8) with figures based on data obtained from school and class records. These figures represent the average number of months that students spent in their respective programmes during the criterion time period, i.e. September, 1965 to June, 1967 (July for Main Street students). These figures may be considered more accurate than some of the other estimates presented as they are not based on the memory of the individual students in the sample.

Not all students in the sample started these programmes in September, 1965. The sample consisted of those who started on or after

September, 1965 and whom the school records showed had left the school's programme on or before June, 1967 (or July, 1967 for Main Street).

As will be noted later, receiving schools for these "graduates" frequently provided further assistance and/or special classes.

TABLE 8

TIME SPENT IN PROGRAMME BY "GRADUATE" STUDENTS: FOR THE SELECTION TIME PERIOD SEPTEMBER, 1965 TO JUNE (OR JULY FOR MAIN STREET SCHOOL) 1967 - MAXIMUM TIME POSSIBLE EQUALS 22 (23) MONTHS (BASED ON SCHOOL OR CLASS RECORDS)

	Full-Time Programme		Withdrawal Programme
	Main Street	Givins	
Number of Students	65	42	180
TOTAL	107		
Average Number of Months	7.8	7.4	10.6
TOTAL	7.6		
Average Number of Hours Per Day	all day*	all day*	1.5

* The programme includes Art, Science and other subjects but all teachers are teachers of English as a second language and it is considered a full-time programme.

Table 9 represents the time-in-programme based on students' estimates as made on the Student Questionnaire. It was not feasible to require students to estimate their time-in-programme for the criterion period as shown in the previous table. Thus, the time period for which students made their estimates was longer than the criterion period; that is, it covered the period from September, 1965 up to the time of data collection, May, 1968.

It is shown that the students' estimates correspond closely with the figures taken from school records. Withdrawal "graduates" under-

estimated their time by about one month and the Main Street "graduates" overestimated by about one-third of a month. (It may be more difficult to recollect the length of a part-time programme.)

TABLE 9

TIME SPENT IN PROGRAMME BY "GRADUATE" STUDENTS: FOR THE SELECTION TIME PERIOD PLUS PERIOD UP TO DATA COLLECTION: MAY, 1968 (BASED ON STUDENTS' ESTIMATES ON THE QUESTIONNAIRE)

	Full-Time Programme		Withdrawal Programme
	Main Street	Givins	
Number of Students	65	42	180
TOTAL	107		
Average Number of Months Spent By "Graduates" in Programme	8.0	7.7	9.5
Average Number of Hours Per Day Spent by "Graduates"	all day	all day	1.6

When data were processed and examined in detail, it was found that some of the Main Street "graduates" received additional instruction. School records indicated that some thirty students had continued their special English possibly in a withdrawal programme; however, these students may have included summer and/or night school instruction in their time estimates.

Table 10 shows a breakdown of the Main Street "graduates" receiving special instruction at Main Street only and those who received additional instruction.

TABLE 10

ADDITIONAL INSTRUCTION FOR SOME OF THE MAIN STREET "GRADUATES"
(AS REPORTED BY STUDENTS)

	Main Street Plus Additional Instruction	Main Street Only	Total*
Number of Students	30	35	65
Average Number of Months at Main Street	7.97	8.10	8.03
Average Number of Hours Per Day	all day	all day	all day

Additional Instruction

Number of Students	30
Average Number of Additional Months	6.87
Average Number of Hours Per Day	1.06

* From Table 9.

Another factor that could not be controlled was attendance in a Toronto school prior to placement in the classes from which the sample was drawn. As expected, it was found that some students, matched for inclusion in the study, had entered the system before September, 1965. It was also found that the entry dates differed considerably for the groups.

Table 11 shows the proportion of students in each group who entered the system before September, 1965. The major difference between the groups is not the proportions entering the system before the criterion date but rather the average length of time that they had spent.

TABLE 11

TIME IN THE TORONTO SYSTEM: FOR STUDENTS IN THE "GRADUATE" SAMPLES

	Main Street n = 65	Givins School n = 42	Withdrawal Programme n = 180
Number of Students Entering System on or after September, 1965	52 or 80.0%	32 or 76.2%	122 or 67.7%
Number of Students Entering System Before September, 1965	13 or 20.0%	10 or 23.8%	58 or 32.3%
Average Number of Years in Toronto School System Before September, 1965	.87	.45 (.68)	1.66

The preceding information indicating additional instruction received after "graduating" from special programmes suggests that the term "graduates" was a misleading label for the student samples. Some Main Street students received additional instruction after leaving Main Street and about one-third of the withdrawal students had been in the school system before enrollment in the classes which were sampled.

Eleven months elapsed between June, 1967, the cut-off date for sample selection and May, 1968 when the data were collected and it was found that some students were still receiving assistance which they reported as special instruction. (Category 14 of the Questionnaire which asked the students whether they were "now receiving instruction in special English classes?") These data, presented in Table 12 is based on students' self reports. Whether the assistance was actually provided in a special class is less important than the fact that the students considered themselves to be still receiving some form of special English instruction.

The differences among proportions in Table 12 is not significant, but it will be noted that the Givins "graduates" reported the highest incidence of continued attendance.

TABLE 12

STUDENTS IN THE SAMPLE STILL RECEIVING ADDITIONAL INSTRUCTION: MAY, 1968 (AS REPORTED BY STUDENTS)

	Main Street	Givins School	Withdrawal Programme
Number of Students Reporting Continued Special Instruction in English	24 or 36.9%	21 or 50.0%	70 or 38.9%
Number of Students Reporting No Additional Instruction	41 or 63.1%	21 or 50.0%	110 or 61.1%
TOTAL	65 or 100.0%	42 or 100.0%	180 or 100.0%

Chi-square = 1.930

A value of 9.49 is required for significance at the .05 level.

As noted earlier, one of the criteria for selecting and matching was instruction within a specific time period. "Graduates" of Main Street (including Givins) were selected on the basis of their having been in and out of the programme between September, 1965 and June (or July) 1967. The withdrawal "graduates" were selected, to the extent that school and class records allowed, for the same time period.

In summary, it can be said that the Student Questionnaires made it apparent that the school system in responding to the students' varied needs, including language instruction, had not provided two tightly controlled and identifiably different situations. Rather, efforts to match the samples notwithstanding, the students had a wide variety of experiences in receiving instruction in English as a second language.

In light of the data presented in this section it should be clear to the reader that it is NOT possible to identify precisely a Main Street "graduate" group or a withdrawal "graduate" group. Even after they leave special programmes or move to other schools, principals and teachers continue to make special provisions where suitable and possible.

Therefore the following results of test performance are legitimate comparisons of students for whom two types of programmes were provided as part of their school experience.

The extent of variation was not revealed until the Questionnaire data was analysed. The following is therefore NOT a comparison of just the programmes. Indeed, such a comparison is impossible within the present student body.

RESULTS

The performance data for the student samples of this report were collected on the same measures[8] that were used in studying the 25% sample of Grades 5, 7 and 9. The test performance of the two groups (Main Street and withdrawal) is presented in tables without separating subgroups on the basis of language, grade, age or sex. A second analysis, presented graphically, does subdivide the groups by age.

The analysis of the test data was based on group performance, for several reasons. Some students were absent for one or more of the tests and an analysis by subgroups such as language group or grade would have led to comparisons involving so few students as to be meaningless in some cases. The matching of samples was planned to make such general comparisons between the two groups reasonable.

Table 13 reports the average scores obtained by the two groups on ten measures. Only the test of Computational Skill showed any statistically significant difference. This modest difference favoured the withdrawal group. None of the other nine measures showed any difference of either statistical significance or importance in terms of academic achievement.

---

8 The measures (tests and teacher ratings) are described in the report entitled "Students of Non-Canadian Origin: A Descriptive Report of Students in Toronto Schools," Research Department, 1969. Performance on these measures provides a partial picture of school success; the ratings by teachers provide information about the student's progress in the regular classroom. Other aspects of personality and adjustment are not included, although their importance is acknowledged. They could not be adequately considered in this phase of the study.

TABLE 13

MEAN SCORES OF "GRADUATE" GROUPS AND COMPARISON OF DIFFERENCES

Instrument	Main Street "Graduates"			Withdrawal "Graduates"			t**
	Number of Students*	Average Score	Standard Deviation	Number of Students*	Average Score	Standard Deviation	
Computational Skill	70	21.1	8.8943	138	25.3	8.5527	-3.2881 ($p<.01$)
Picture Vocabulary	72	26.1	6.3749	151	26.2	6.9792	- .1024 (n.s.)
Progressive Matrices	74	34.3	11.6670	149	33.3	13.1442	+ .5526 (n.s.)
Teacher Ratings	75	31.3	14.1092	144	32.6	11.9004	- .7169 (n.s.)
English Competence Test							
Part I	79	37.5	6.6294	153	38.3	5.8540	- .9404 (n.s.)
Part II	79	37.5	7.7890	153	37.9	7.5306	- .3782 (n.s.)
Part III	80	17.4	3.0199	154	16.8	3.1480	+1.4111 (n.s.)
Part IV	79	7.4	3.0182	152	8.0	2.8495	-1.4866 (n.s.)
Part V	80	7.7	2.5238	151	8.1	2.7294	-1.0837 (n.s.)
Part VI	71	3.6	1.9723	131	3.3	2.1702	+ .9640 (n.s.)

* If all students had been present for all measures, each n for the Main Street sample would have been 107 and each n for the withdrawal sample would have been 180.

** A "t" value of ± 2.576 is required for significance at the .01 level (two-tailed).

Ten graphs (Figures 2 through 11) present the performance information in more detail. The students have been divided into five age ranges. The reader is cautioned that some of these groups contain only a few students. In addition, the average performance for the same age ranges is presented for the city-wide sample, which did not go past Grade 9. This presentation shows clearly the small differences in test performance between the two "graduate" groups. It also suggests the degree to which both groups were still different from their age mates in Toronto schools.

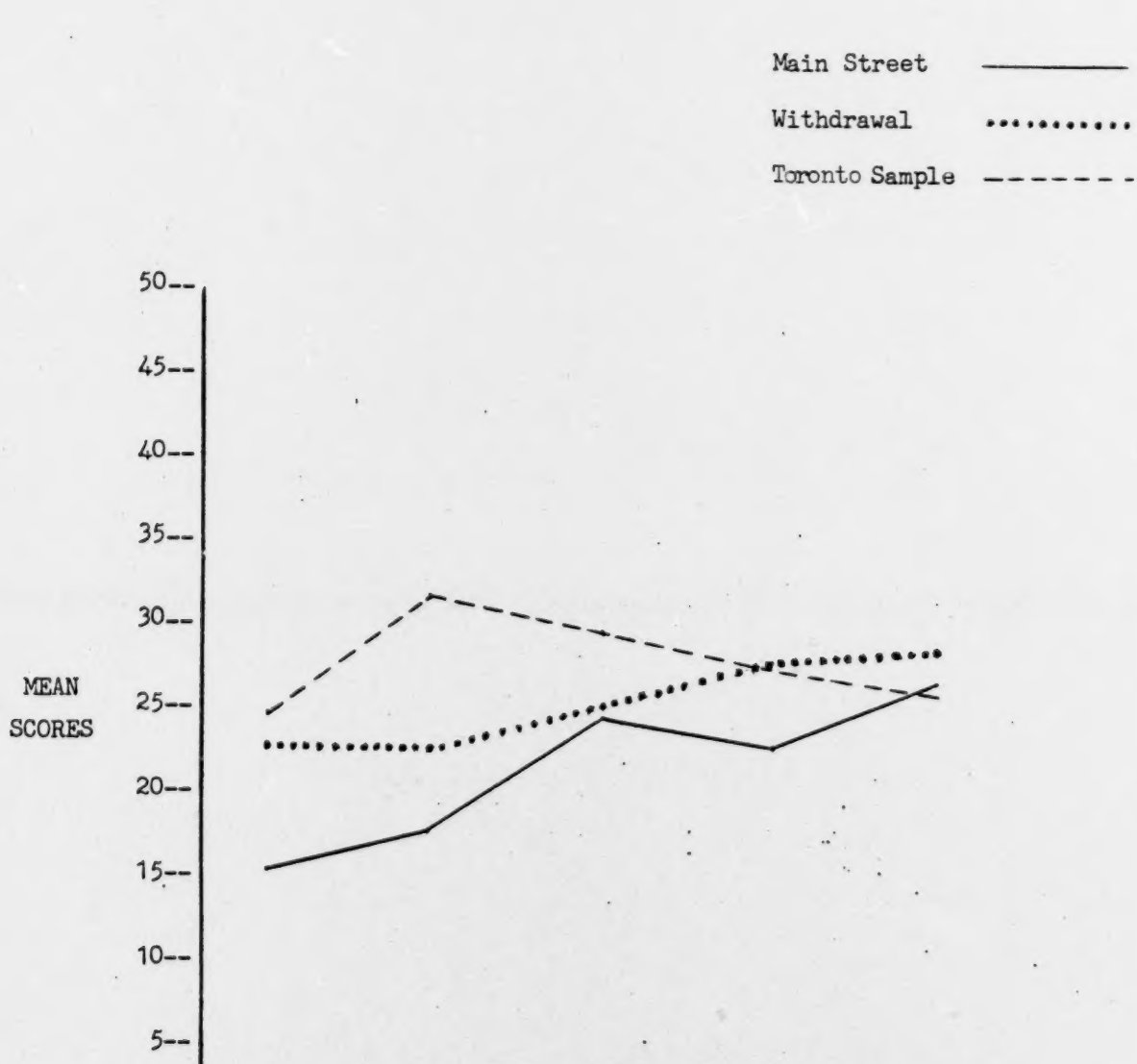

Figure 2. Computational Skill (Maximum Score Possible = 50)

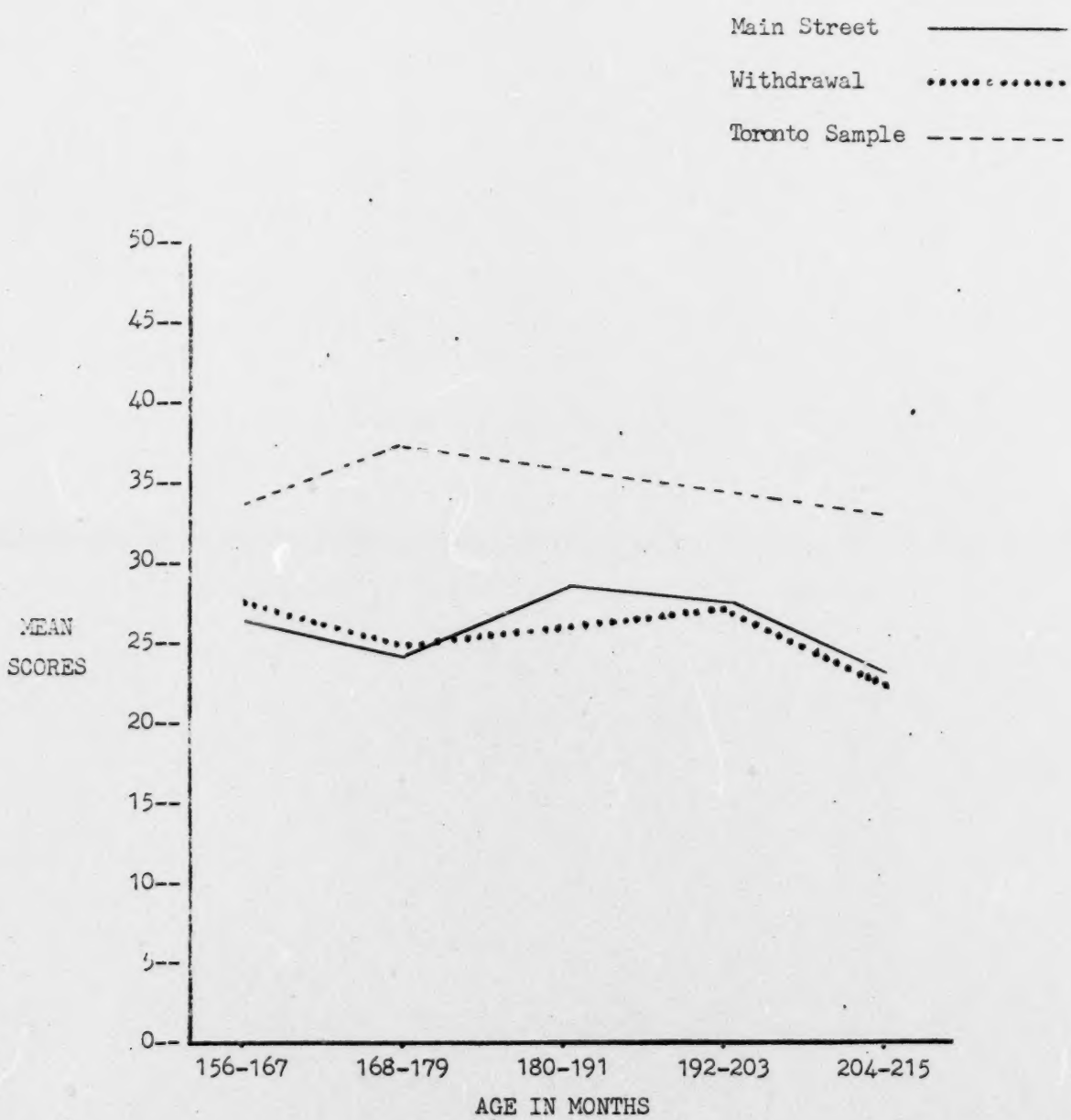

Figure 3. Picture Vocabulary (Maximum Score Possible = 50)

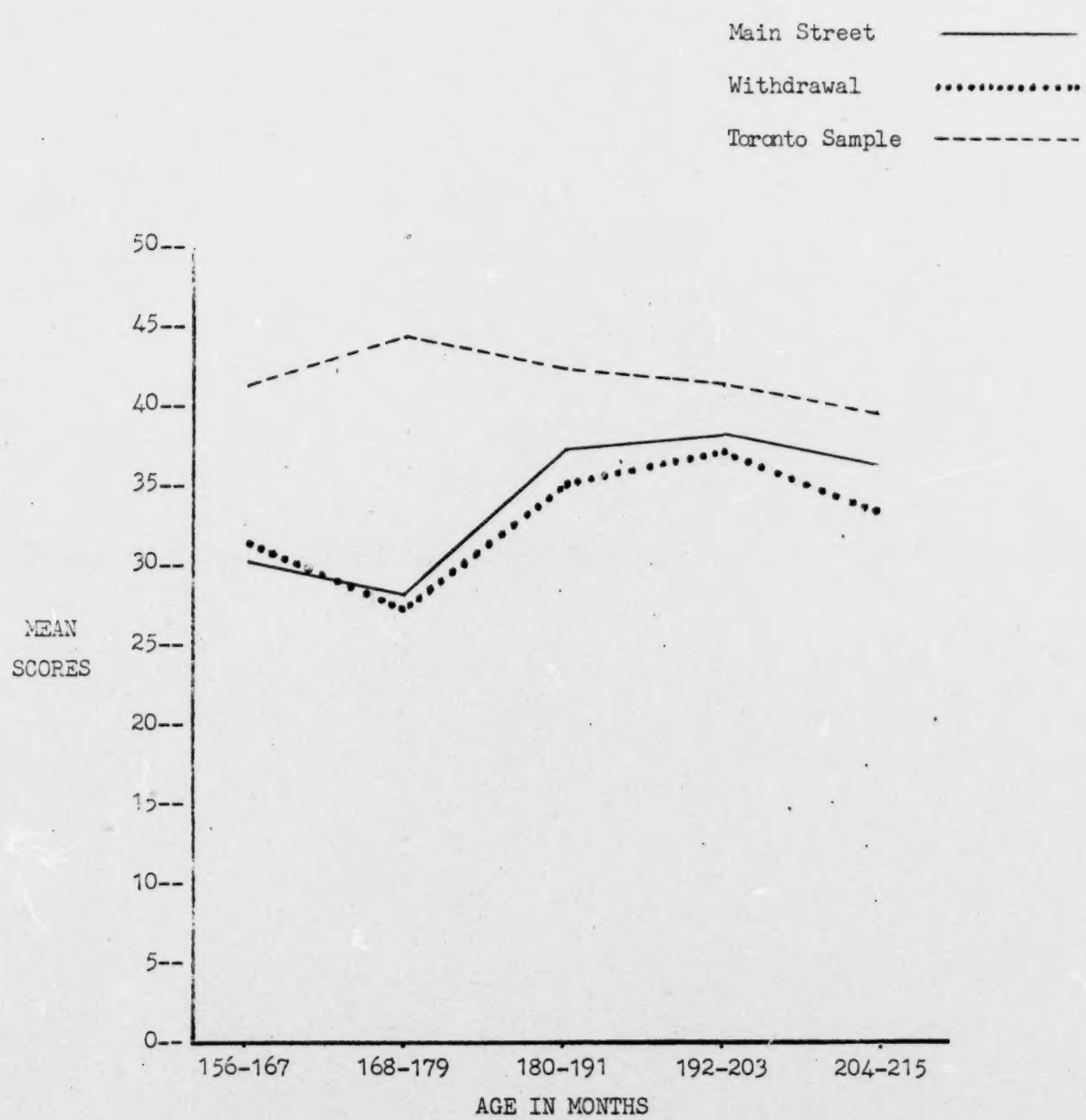

Figure 4. Progressive Matrices (Maximum Score Possible = 60)

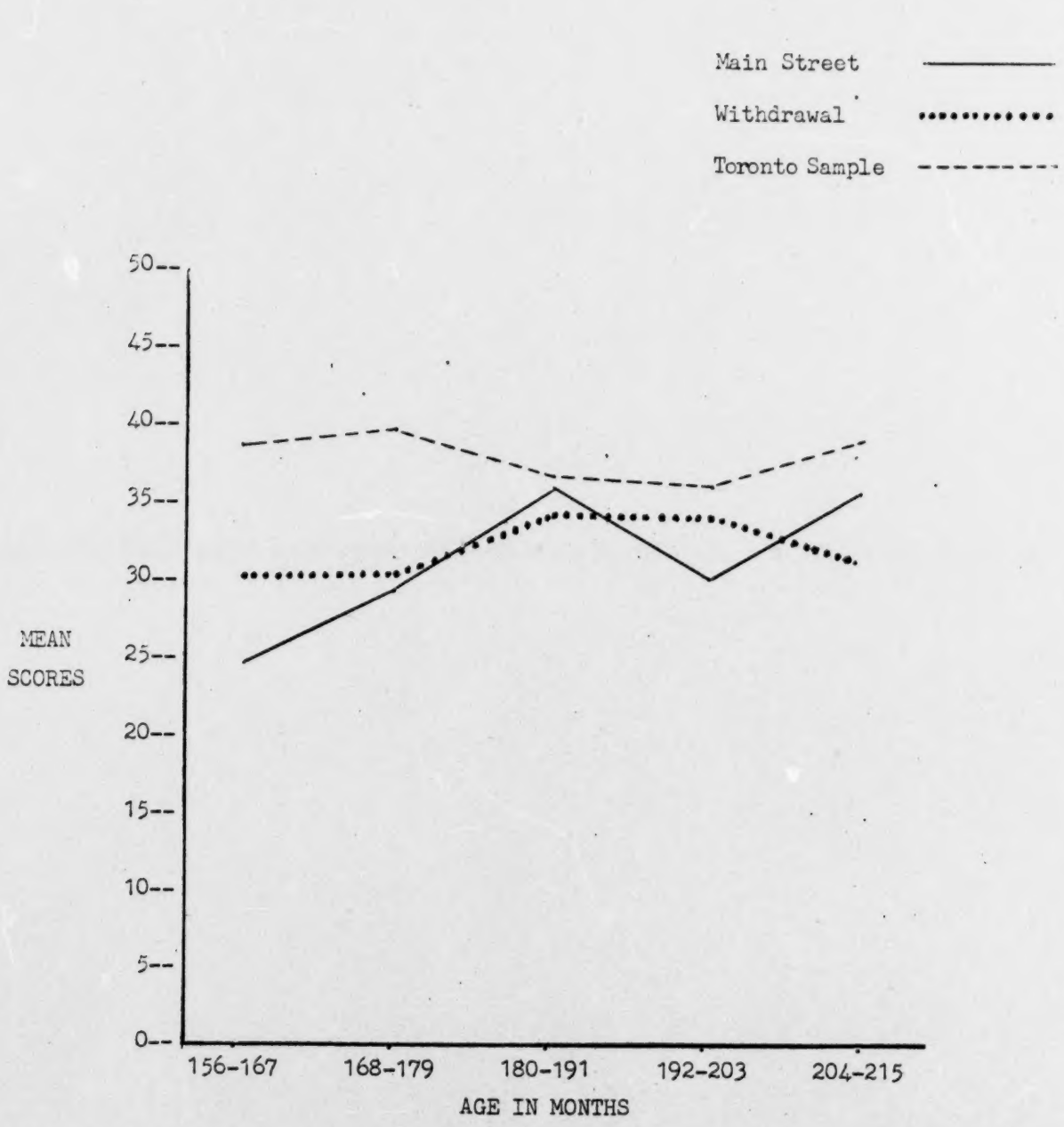

Figure 5. Total Teacher Rating (Maximum Score Possible = 72)

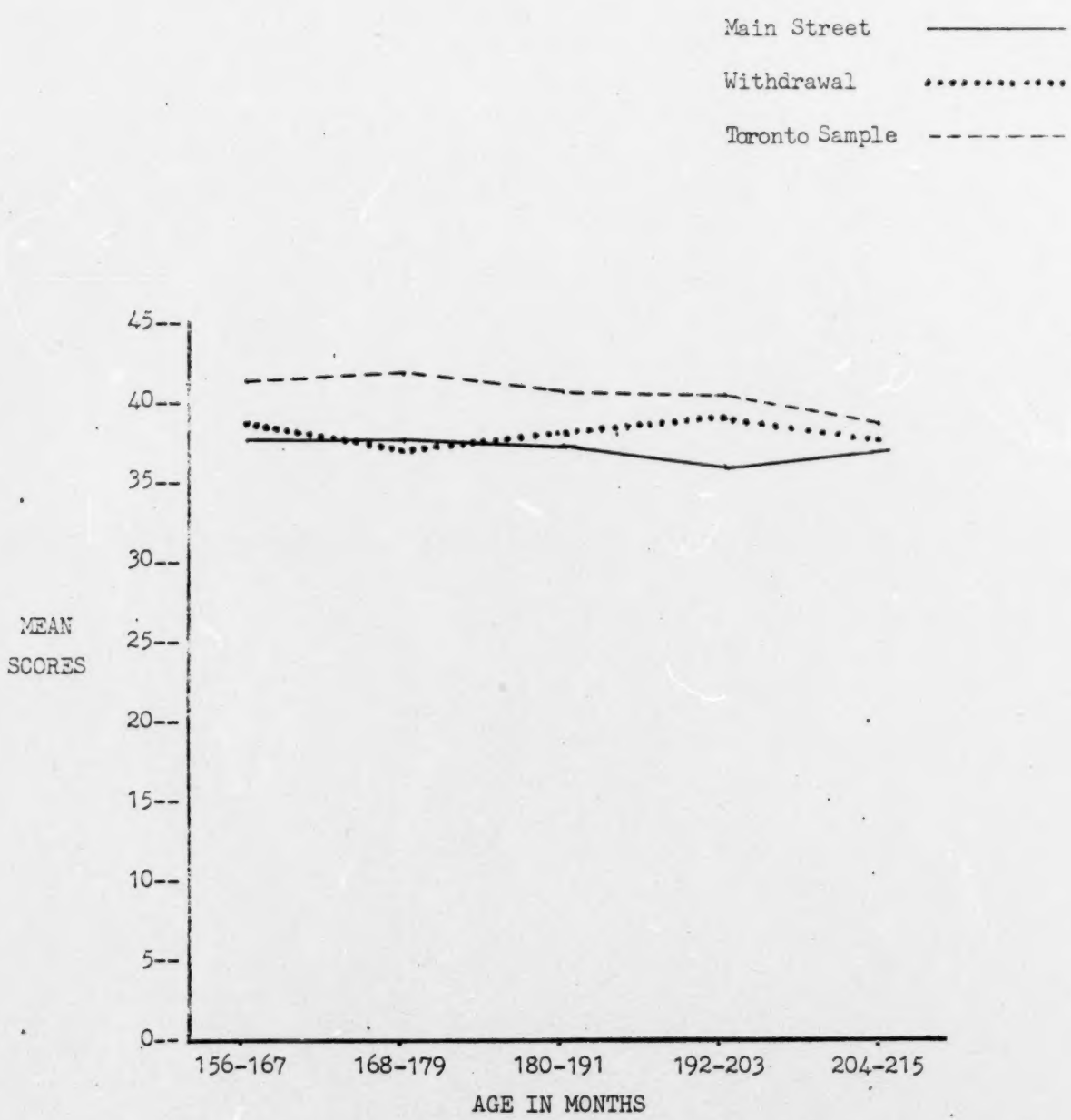

Figure 6. English Competence -- Part I (Maximum Score Possible = 45)

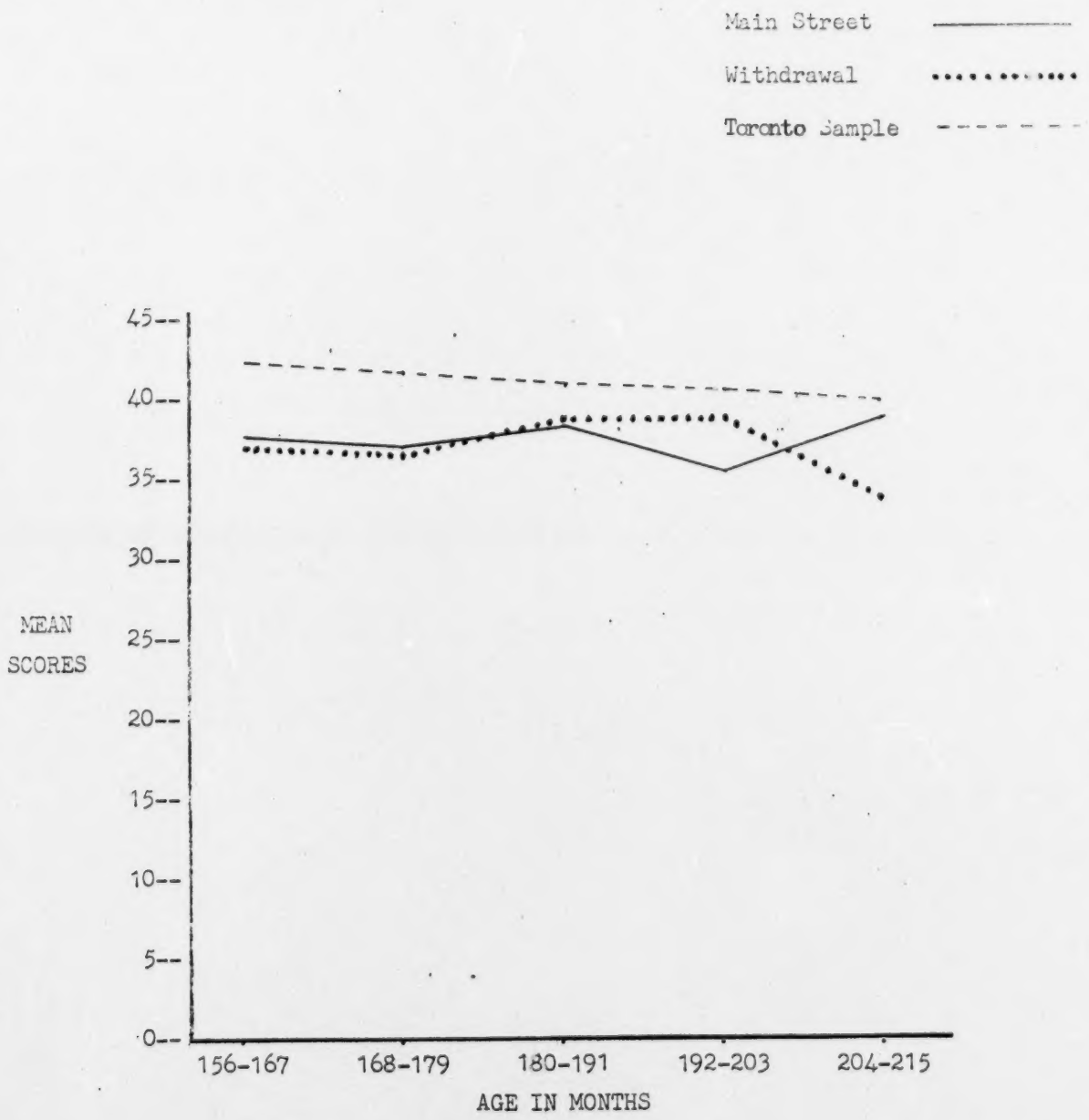

Figure 7. English Competence -- Part II (Maximum Score Possible = 45)

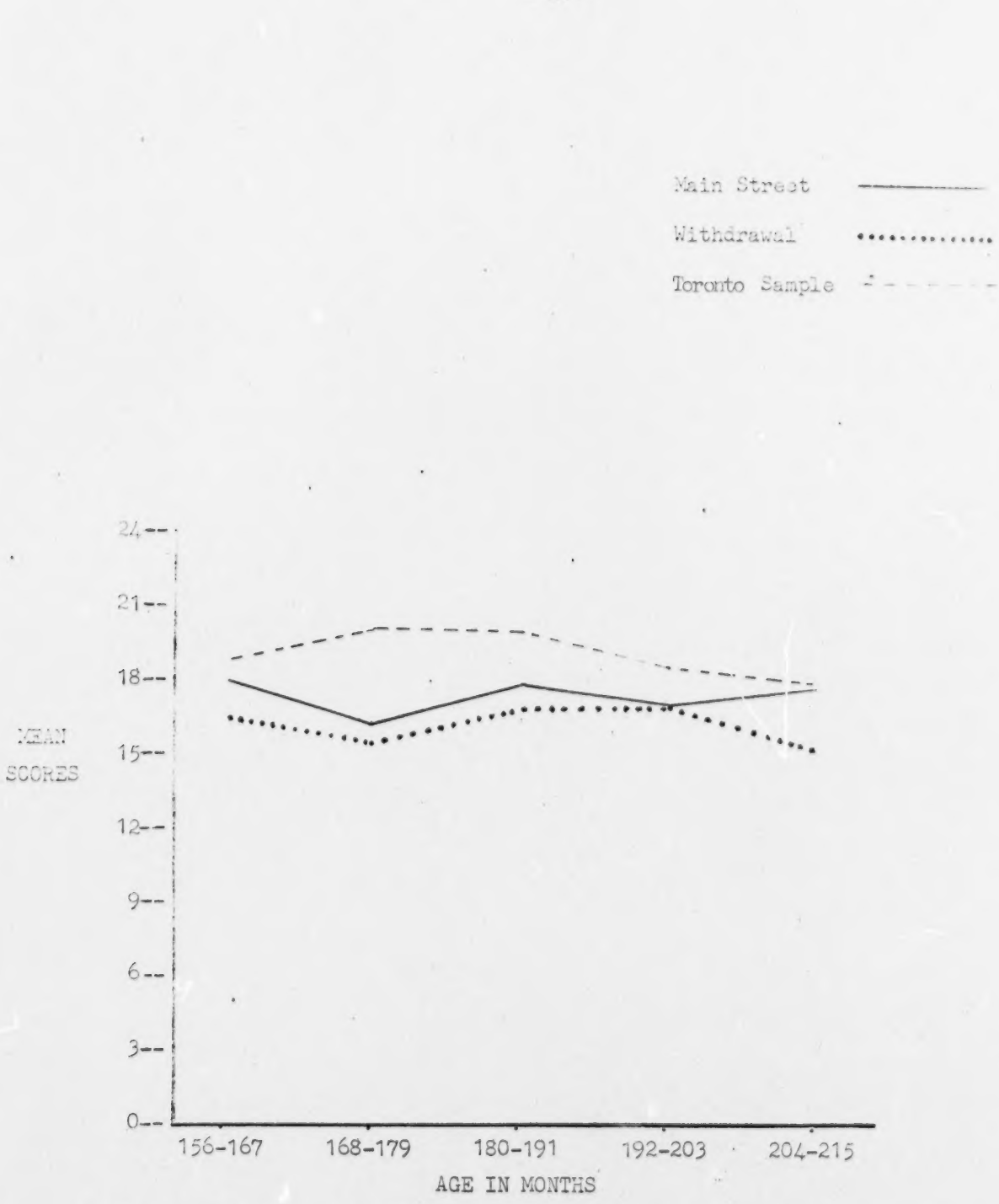

Figure 8. English Competence -- Part III (Maximum Score Possible = 24)

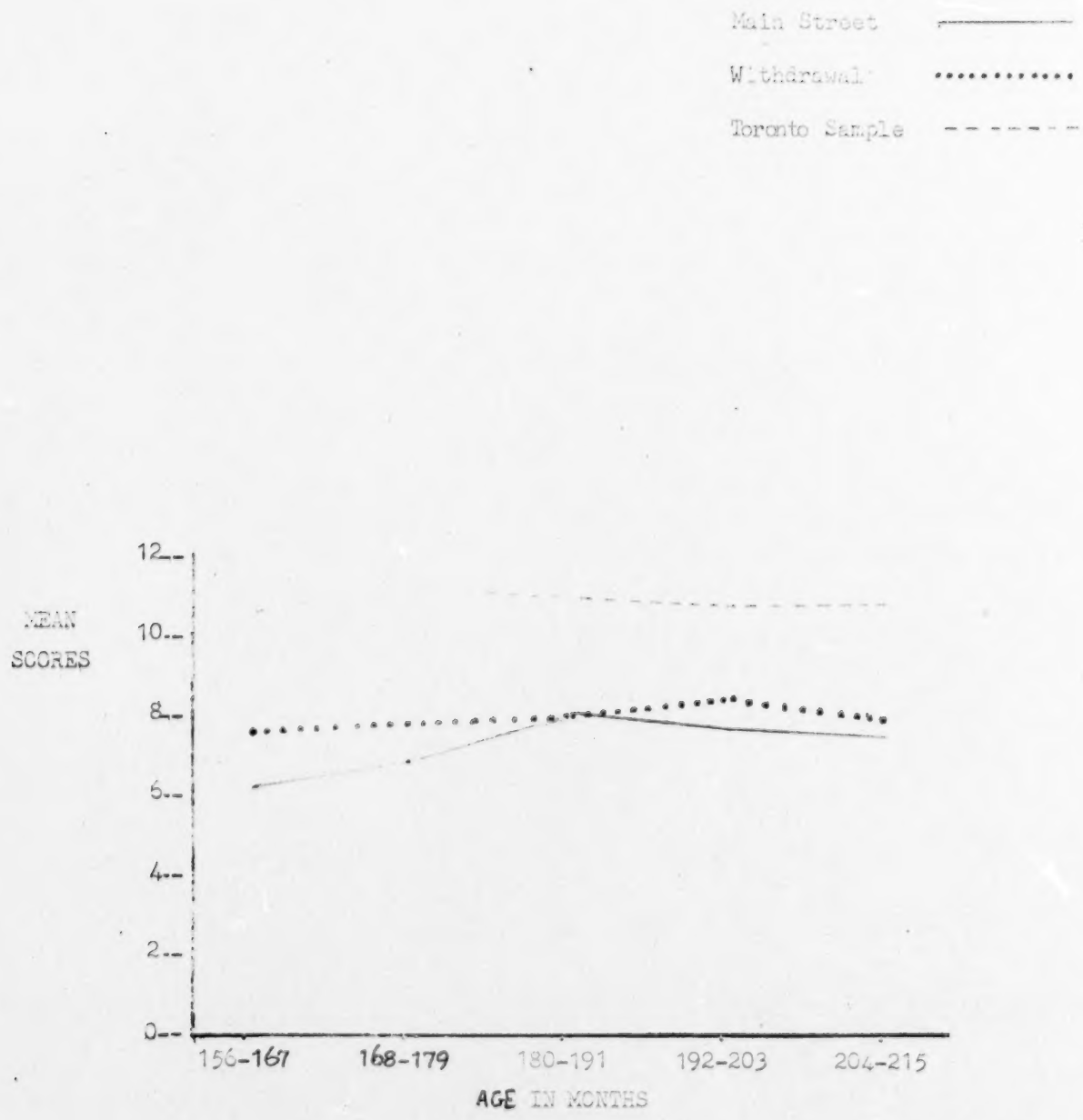

Figure 9. English Competence -- Part IV (Maximum Score Possible = 12)

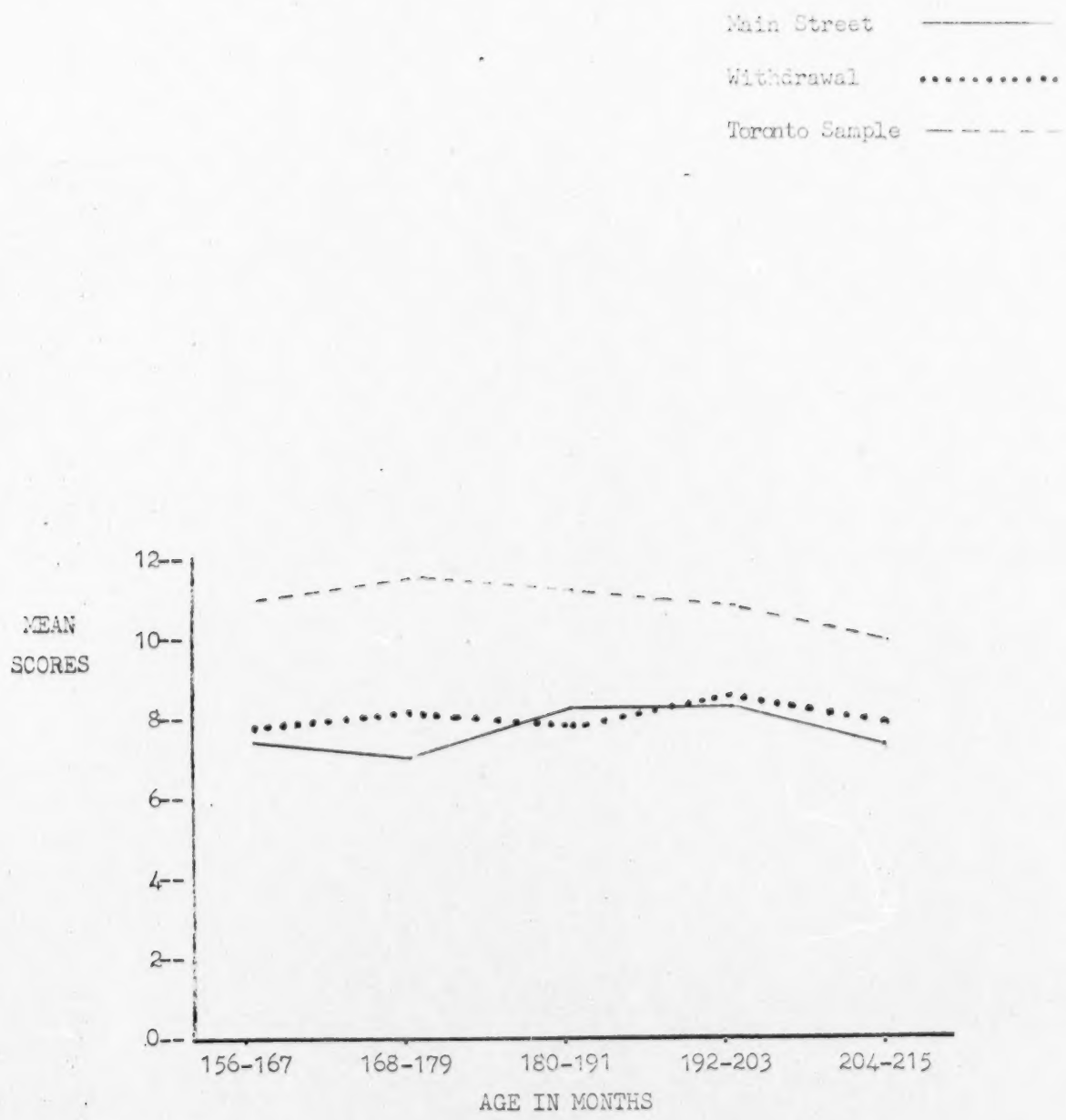

Figure 10. English Competence -- Part V (Maximum Score Possible = 12)

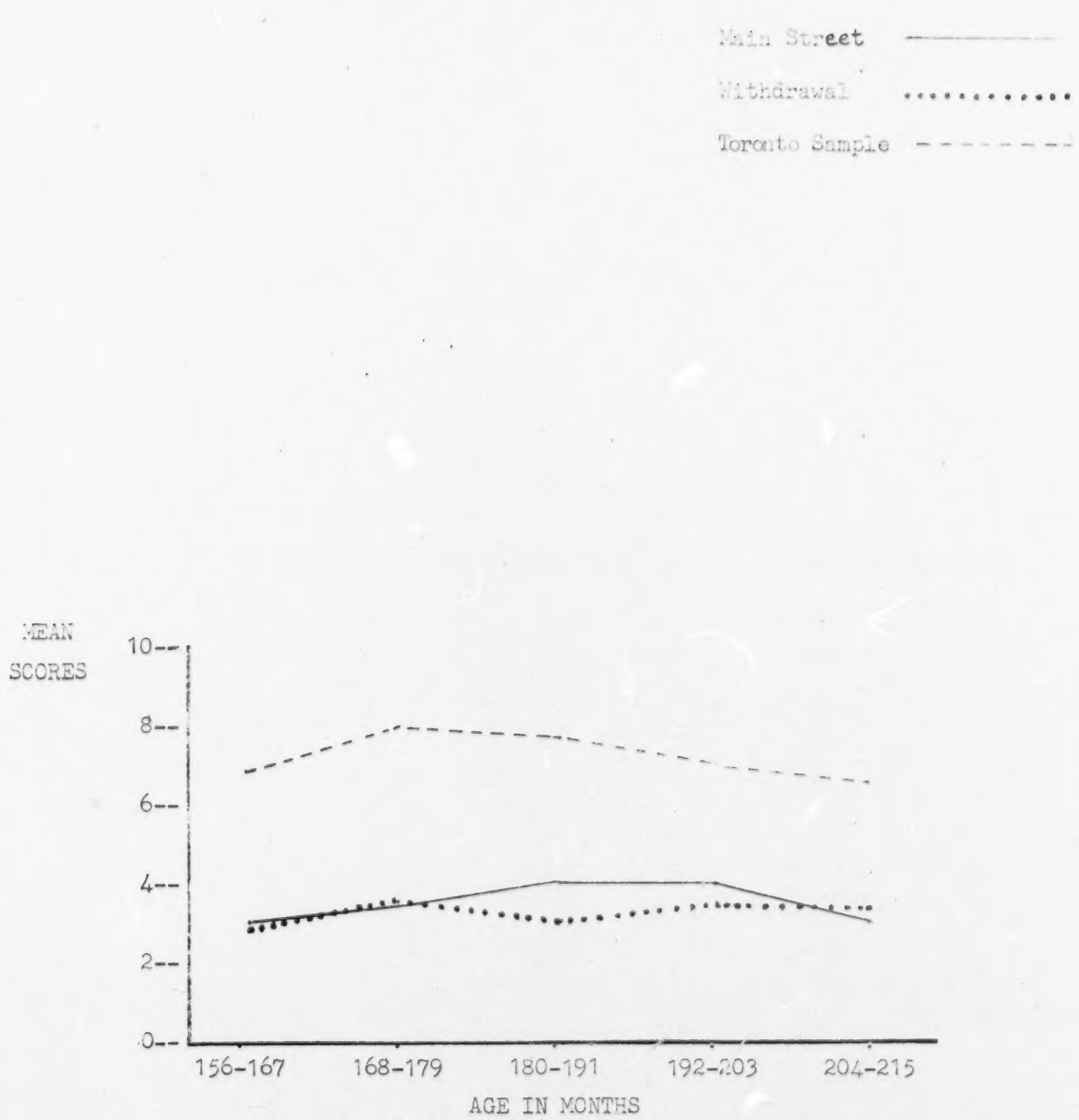

Figure 11. English Competence -- Part VI (Maximum Score Possible = 10)

SUMMARY

This report compares two groups of students who entered and "graduated" from a Main Street or withdrawal programme in which English was taught as a second language. The two samples were matched on the factors of age, sex and first (native) language. Attrition and the variety of provisions made for individual students restrict any comparisons between programmes. In general the differences between the samples, in age and sex, were few and the similarities in background were numerous so that the matching was considered adequate for the purpose of general comparisons of achievement.

Some limitations were inherent in the study. Prior education and instruction in English could not be controlled. It became evident while student data were being collected and analyzed that a student could not be clearly labelled or categorized as just a Main "graduate" or just a withdrawal "graduate." Other programmes and resources in the Toronto school system caution against this simple categorization. In other words, some students had other instruction in English, including summer school. Other limitations concerned the age groups which the various programmes attempted to serve, making it difficult to generalize the performance, especially of the selected withdrawal sample to all withdrawal "graduates." Also, the population of Main Street is not proportionally representative of the language groups across the City.

Accepting the adequacy of the matching between the groups there are still other restrictions based on the test measures used. There are a variety of criteria considered important in assessing the success of a programme in English as a second language. Only some of these criteria

are reflected in the data which are reported. Academic progress and success in school, as rated by the teacher, were the foci of this study. Later reports will elaborate on the measures and consider the progress of students with various backgrounds. Interviews will provide additional data on "adjustment."

The results showed no significant differences between the Main Street "graduates" and the withdrawal "graduates" in performance on any of the standardized tests with the exception of a small statistically significant difference on the test of arithmetical computation. This difference favoured the withdrawal "graduates." On the average, though these two groups of "graduates" were highly similar they had not yet reached the average level performance of students in regular classes who were the same age.

Students who had "graduated" from either programme were frequently provided with further assistance in English as a second language. Leaving a special programme did not mean the termination of help for these students.

APPENDIX

NEW CANADIAN SURVEY

1. Were you born in Canada?

   ▭ yes
   ▭ no

   If NO, how old were you when you came here?

   [0] [0]
   [1] [1]
   [2]
   [3]
   [4]
   [5]
   [6]
   [7]
   [8]
   [9]

2. What grade did you enter when you started school in Toronto?

   ▭ Jr. Kdgn.
   ▭ Sr. Kdgn.
   ▭ Opportunity
   ▭ A.V.
   ▭ Main Street
   ▭ Reception Centre
   ▭ Grade 1
   ▭ Grade 2
   ▭ Grade 3
   ▭ Grade 4
   ▭ Grade 5
   ▭ Grade 6
   ▭ Grade 7
   ▭ Grade 8
   ▭ Grade 9

3. How often is English spoken in your home?

   ▭ always
   ▭ sometimes
   ▭ never

4. SEX

   ▭ boy
   ▭ girl

5. Before learning English did you learn any other language?

   ▭ yes
   ▭ no
   ▭ learned Eng. & other together

   If YES, or learned English and other together what was the other language?
   (MARK ONLY ONE)

   •01• Arabic
   •02• Chinese
   •03• Czecho-Slovak
   •04• Danish
   •05• Dutch
   •06• English
   •07• Estonian
   •08• French
   •09• German
   •10• Greek
   •11• Hungarian
   •12• Italian
   •13• Japanese
   •14• Latvian
   •15• Lithuanian
   •16• Maltese
   •17• Norwegian
   •18• Polish
   •19• Portuguese
   •20• Roumanian
   •21• Russian
   •22• Spanish
   •23• Swedish
   •24• Ukrainian
   •25• Yiddish
   •26• Yugoslavian
   •27• Other

6. Could you speak English when you entered a Toronto school?

   ▭ yes
   ▭ no
   ▭ some

7. What grade are you in right now?

   ▭ Grade 5
   ▭ Grade 6
   ▭ Grade 7
   ▭ Grade 8
   ▭ Grade 9
   ▭ Grade 10
   ▭ Grade 11
   ▭ Grade 12
   ▭ Grade 13
   ▭ Main Street
   ▭ Reception Centre

OFFICE USE ONLY
04562

PRINT LAST NAME, FIRST NAME, MIDDLE INITIAL.
Darken the matching letters below.

Print the right numbers in spaces below headings, then darken matching numbers below.

AGE	DATE OF BIRTH Month	DATE OF BIRTH Year	SCHOOL NUMBER	When did you start school in Toronto? Month	When did you start school in Toronto? Year

UTILITY FORM 3825

NAME: _____
(Please Print)

8. What language does your mother speak most of the time? (MARK ONLY ONE)

•01	Arabic	•10	Greek	•19	Portuguese
•02	Chinese	•11	Hungarian	•20	Roumanian
•03	Czecho-Slovak	•12	Italian	•21	Russian
•04	Danish	•13	Japanese	•22	Spanish
•05	Dutch	•14	Latvian	•23	Swedish
•06	English	•15	Lithuanian	•24	Ukrainian
•07	Estonian	•16	Maltese	•25	Yiddish
•08	French	•17	Norwegian	•26	Yugoslavian
•09	German	•18	Polish	•27	Other

= have no mother or mother does not live at home

9. What language does your father speak most of the time? (MARK ONLY ONE)

•01	Arabic	•10	Greek	•19	Portuguese
•02	Chinese	•11	Hungarian	•20	Roumanian
•03	Czecho-Slovak	•12	Italian	•21	Russian
•04	Danish	•13	Japanese	•22	Spanish
•05	Dutch	•14	Latvian	•23	Swedish
•06	English	•15	Lithuanian	•24	Ukrainian
•07	Estonian	•16	Maltese	•25	Yiddish
•08	French	•17	Norwegian	•26	Yugoslavian
•09	German	•18	Polish	•27	Other

= have no father or father does not live at home

10. Did you go to Main Street School?
= yes
= no

If YES, when did you start?

Month		Year	

Darken matching numbers below

0	0	0	0
1	1	1	1
	2	2	2
	3	3	3
	4	4	4
	5	5	5
	6	6	6
	7		7
	8		8
	9		9

and when did you leave?

Month		Year	

Darken matching numbers below

0	0	0	0
1	1	1	1
	2	2	2
	3	3	3
	4	4	4
	5	5	5
	6	6	6
	7		7
	8		8
	9		9

11. Since starting school in Ontario or Canada, have you taken any special classes in English? (This does not include Main St. School.)
= yes
= no

If YES, for how many months? → and how many hours per day?

0	0	0
1	1	less than one
2	2	1
3	3	2
4	4	3
5	5	4
6	6	5
7	7	6
8	8	
9	9	

12. Did you go to summer school to learn English?
= no
= one summer
= two summers
= three summers
= four summers
= more than four summers

13. Did you go to night school to learn English?
= no
= one year
= two years
= three years
= four years
= more than four years

14. Are you now receiving instruction in special English classes?
= yes
= no

15. How long did your mother go to school?
= 0 - 4 years
= 5 - 8 years
= 9 - 12 years
= more than 12 years
= university or college
= don't know

16. How long did your father go to school?
= 0 - 4 years
= 5 - 8 years
= 9 - 12 years
= more than 12 years
= university or college
= don't know

17. If you are past Grade 8 what programme are you in?
= two year
= three year
= four year
= five year
= not yet in Grade 9

OFFICE USE ONLY
04562

0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

NAME: _____
(Please Print)

18. How many years did you go to school in a country other than Canada?

0	0
1	1
	2
	3
	4
	5
	6
	7
	8
	9

If your answer is more than "00" how many years of this schooling took place in English?

0	0
1	1
	2
	3
	4
	5
	6
	7
	8
	9

19. How many years did you go to school in Canada but not in Toronto? (Include parts of Metro, e.g. Scarborough, Etobicoke, etc.)

0	0
1	1
	2
	3
	4
	5
	6
	7
	8
	9

20. Have you ever attended classes in Canada to learn a language other than English? (This does not include French, etc., in school.)

- ☐ no
- ☐ one year
- ☐ two years
- ☐ three years
- ☐ four years
- ☐ five years
- ☐ more than five years

If YES, what was the language of these classes?

01 Arabic	10 Greek	19 Portuguese
02 Chinese	11 Hungarian	20 Roumanian
03 Czecho-Slovak	12 Italian	21 Russian
04 Danish	13 Japanese	22 Spanish
05 Dutch	14 Latvian	23 Swedish
06 English	15 Lithuanian	24 Ukrainian
07 Estonian	16 Maltese	25 Yiddish
08 French	17 Norwegian	26 Yugoslavian
09 German	18 Polish	27 Other

21. Are you NOW attending classes outside regular school to learn a language other than English? (This does not include French, etc., in school.)

- ☐ yes
- ☐ no

If YES, what is the language of these classes?

01 Arabic	10 Greek	19 Portuguese
02 Chinese	11 Hungarian	20 Roumanian
03 Czecho-Slovak	12 Italian	21 Russian
04 Danish	13 Japanese	22 Spanish
05 Dutch	14 Latvian	23 Swedish
06 English	15 Lithuanian	24 Ukrainian
07 Estonian	16 Maltese	25 Yiddish
08 French	17 Norwegian	26 Yugoslavian
09 German	18 Polish	27 Other

and about how many hours per week do you attend?

- ☐ one hour
- ☐ two hours
- ☐ three hours
- ☐ four hours
- ☐ five hours
- ☐ more than five hours

22. Have you always lived in Toronto or in a big city like Toronto?

- ☐ yes
- ☐ no

If NO, how many years have you lived in another kind of area? (e.g. a farm, village, an area far away from a city, etc.)

0	0
1	1
	2
	3
	4
	5
	6
	7
	8
	9

TEACHER USE ONLY

- ☐ Main Street
- ☐ Withdrawal
- ☐ Reception Centre

OFFICE USE ONLY

04562

0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9

UTILITY FORM 3427
OPTICAL SCANNING CORPORATION

END

DEPT.OF HEALTH
EDUCATION AND
WELFARE
U.S. OFFICE OF
EDUCATION
ERIC
DATE FILMED

7 30 73